



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,246	02/05/2001	David J. Povich		2352

7590 08/02/2004

JOHN K. McCOLLOCH
5291 COLONY DRIVE NORTH
1ST FLOOR
SAGINAW, MI 48603

EXAMINER

ROSALES HANNER, MORELLA I

ART UNIT	PAPER NUMBER
----------	--------------

2128

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/777,246

Applicant(s)

POVICH, DAVID J.

Examiner

Morella I Rosales-Hanner

Art Unit

2128

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 05 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 2128

Detailed Action

1. **Claims 1 – 22** have been examined and are pending.

Drawings

3. **Figures 1, 2 and 3** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 4.1 **Claim 10** recites the limitation "**product database**" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

- 5.1 **Claims 1 – 6 and 9 - 16** are rejected under 35 U.S.C. 102(a) as being anticipated by US Patent No. 6,647,305 issues to David H. Bigelow, hereafter referred to as *Bigelow*.

Art Unit: 2128

5.1.1 As regard to Claim 1 *Bigelow* teaches [Fig 1 and corresponding text] a product design apparatus comprising:

- a product database server operable to provide a plurality of product styles, a plurality of customizable configurations [attributes], and a plurality of composite images;
- at least one client computer for accessing the product database to select a product style and the customizable configurations based upon choices presented by the database and selections made via the client computer, the product database server being operable to provide a custom product design by combining a selected one of the product styles with a selected plurality of configurations; **and**
- a plurality of graphic representations illustrative of the product styles and the customizable attributes, said database server being operable to display said product styles on the client computer, said product database being operable to provide a composite image representing a product having the selected style and the selected attributes.

5.1.2 As regard to **Claim 2**, *Bigelow* teaches [Fig 1 and corresponding text] a design apparatus wherein the product database server and the client computer are connected by a TCP/IP compliant protocol.

Art Unit: 2128

5.1.3 As regard to **Claim 3**, *Bigelow* teaches [Fig 5 and corresponding text] a design apparatus wherein the product database is operable to display a plurality of quantity choices of the product having the selected custom design.

5.1.4 As regard to **Claim 4**, *Bigelow* teaches [Fig 5 and corresponding text] a design apparatus wherein the product database displays the custom design product having the composite image, the product style, the customized attributes, and the quantity choices.

5.1.5 As regard to **Claim 5**, *Bigelow* teaches [Col 9, lines 41 - 66] a design apparatus wherein the client computer is operable to submit the custom design product to the product database to initiate a request [order] for said product.

5.1.6 As regard to **Claim 6**, *Bigelow* teaches a product design method using sequential computer screens to create a final product according to a predetermined one of a plurality of available configurations [specifications] comprising:

- (a) displaying a plurality of product styles and a plurality of customization attributes on a plurality of said sequential computer screens [Fig 5 and corresponding text];
- (b) selecting one of said product styles and one or more of said attributes [Figs 8 & 9 and corresponding text];

Art Unit: 2128

- (c) producing an image of a final product have the selected style as the selected attributes [Col 7, line 64 – Col 8, line 23]; and
- (d) displaying said image and product specification information based on the selected style and attributes [Col 7, line 64 – Col 8, line 23].

5.1.7 As regard to **Claim 9**, *Bigelow* teaches an article of manufacture comprising:

- a computer readable medium having a computer readable program code embodied thereon, said computer readable program being configured to perform the steps of:
 - displaying a plurality of selectable product styles and a plurality of selectable customizable attributes [Fig 5 and corresponding text];
 - receiving selected product style and attribute information [Fig 14 and corresponding text];
 - selecting an image using the received information [Figs 8 & 9 and corresponding text]; and
 - displaying the selected image together with product specification information based on the received information [Col 7, line 64 – Col 8, line 23].

5.1.8 As regard to **Claim 10**, *Bigelow* teaches [Fig 1 and corresponding text] a product design system, comprising:

Art Unit: 2128

- a tool database operable to provide a plurality of tool styles, a plurality of customizable attributes, and a plurality of composite images;
- at least one client computer operable to access the tool database and select a tool style and one or more customizable attributes based upon choices presented by the tool database and decisions made via the client computer;
- said tool database being operable to provide a custom design tool by combining a selected one of the tool styles with the selected attributes; and
- a plurality of graphic representations illustrative of a custom design tool having the selected tool style and the selected attributes, said custom design tool being displayable on the client computer.

5.1.9 As regard to **Claim 11**, *Bigelow* teaches [Fig 1 and corresponding text] a design system wherein the tool database server and the client computer are connected by a TCP/IP compliant protocol.

5.1.10 As regard to **Claim 12**, *Bigelow* teaches [Fig 5 and corresponding text] a design system wherein the tool database server displays a plurality of quantity choices for the custom design tool.

Art Unit: 2128

5.1.11 As regard to **Claim 13**, *Bigelow* teaches [Fig 5 and corresponding text] a design system wherein the tool database server displays the custom design tool having the composite image, the tool style, the customized attributes, and the quantity choices.

5.1.12 As regard to **Claim 14**, *Bigelow* teaches [Col 9, lines 41 - 66] a design system wherein the client computer is operable to submit the custom design tool to the tool database to initiate a request [order] for said tool.

5.1.13 As regard to **Claim 15**, *Bigelow* teaches 15 a product design method of using sequential computer screens to design a tool according to a specification comprising:

- (a) displaying a plurality of tool styles and a plurality of customization attributes on a computer screen using a plurality of sequential images [Fig 5 and corresponding text];
- (b) selecting one of said tool styles and one or more of said attributes [Figs 8 & 9 and corresponding text];
- (c) creating a tool image having the selected style and attributes [Col 7, line 64 – Col 8, line 23]; and
- (d) displaying said tool image on one of said screens [Col 7, line 64 – Col 8, line 23].

Art Unit: 2128

5.1.14 As regard to **Claim 16**, *Bigelow* teaches [Col 7, line 64 – Col 8, line 23] displaying on said one of said screens selected specifications relating to a tool corresponding to said tool image.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6.1 **Claims 7, 8, 17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,647,305 issues to David H. Bigelow, hereafter referred to as *Bigelow*, as applied to claims 6 and 15 above, in view of US-PAT-NO. 6,414,693 to Berger et al, hereafter referred to as *Berger*. As regard to **Claims 7, 8, 17, and 18**, *Bigelow* teaches a product design method using sequential computer screens to

Art Unit: 2128

create a final product according to a predetermined one of a plurality of available configurations **[Figs 5, 8 & 9 and corresponding text]**.

Bigelow does not expressly teach sending the product specification to a receiver by email.

Berger teaches **[Col 8, lines 13 – 19]** sending the product details to a distributor [receiver] by e-mail. *Berger* also teaches **[Col 1, lines 34 - 44]** that the popularity of the Internet-based commerce has afforded purchasers greater opportunities to select and customize products from a large range of suppliers using remote computers to generate computerized orders and that once these orders are received by system administrator or dedicated staff member they are converted into a confirmed order for a given product.

It would have been obvious to one of ordinary skills in the art, at the time of the invention, to modify the product design system disclosed by *Bigelow* to send the product specification to a receiver via e-mail in order to confirm the order for the requested product as taught by *Berger*.

6.2 **Claims 19, 20, 21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,647,305 issues to David H. Bigelow, hereafter referred to as *Bigelow*, as applied to claim 15 above, in view of US-PAT-NO 6,169,967 issued to Dahlem et al, hereafter referred to as Dahlem. As regard to **Claims 7, 8, 17, and 18**, *Bigelow* teaches **[Fig 6 and corresponding text]** displaying the various properties of a selected tool such as surfaces, axes, parameters, and dimensions and check boxes

Art Unit: 2128

that are used for the selection of particular property options; displaying a plurality of tool styles and a plurality of customization attributes on a computer screen as a plurality of sequential images [**Fig 5 and corresponding text**]; receiving user-selected carbide rotary tool styles and attribute information [**Fig 1 and corresponding text**]; creating a selected image using the received information [**Col 7, line 64 – Col 8, line 23**]; and displaying the selected image along with specification information related to said selected image and based on the received information [**Col 7, line 64 – Col 8, line 23**].

Bigelow does not expressly teach the selected tool styles that includes one of:

- a ball end having a value equal to 50% of the diameter;
- a square end;
- and a corner-radius end having a value less than 50% of the diameter.
- a flat, a reduced cutting diameter, and a neck.
- Formed of carbide

Dahlem teaches [**Fig 1 and corresponding text**] a system for providing engineered bit solutions, which is designed to receive bit design information [**Fig 5B and corresponding text**]. *Dahlem* also teaches [Col 1, Lines 14] rock bit manufacturing companies have traditionally provided product lines which involve maintaining large inventories of bits with the hope that one of those bit designs would be best match a customer's application and thus, solve the customer's problem; that providers of drilling

Art Unit: 2128

bits have usually been product-oriented providers, focusing on providing products to the market place by designing, manufacturing and selling rock bits following a centrally development paradigm and that customers (i.e., drilling operators) would use IADC classifications charts to determine and select the bits which the customer believed would be best suited for their specific drilling needs.

Therefore, it would have been obvious to one of ordinary skills in the art, at the time of the invention, to modify the tool design system as taught by *Bigelow* to provide an engineered bit solution to match the specific needs of a customer and to assist a bit provider avoid maintaining a large inventory of bits.

Additional references

7. The following is a list of references that are relevant to the claimed invention but were not cited by the examiner:

- Piotr Czapiewski, Rajaraman Ganesan, Dean Volkert and Bruce Weber, "Integrated, Computer-Aided Order Fulfillment", April 1999, Integratedengineering.
- US Patent No. 57,289,
- US Patent No. 6,725,257,
- US Patent No. 6,493,724, and
- US Patent No. 5,552,995.

Art Unit: 2128

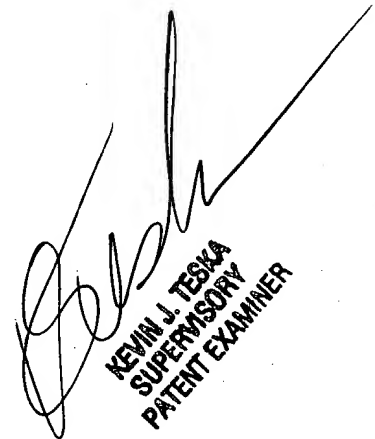
8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Morella Rosales-Hanner whose telephone number is (703) 305-8883. The examiner can normally be reached Monday-Friday from 7:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on 703 305-9704. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

MRH

July 20th, 2004



KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER